

AMENDMENTS TO THE CLAIMS

Listing of claims:

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1. (Currently amended): A method comprising:
obtaining a white point correction for a display device;
obtaining a chromatic correction for the display device; and
generating corrected device-independent color coordinates for the display device based on device-independent coordinates associated with a hard copy, the white point correction and the chromatic corrections.
 2. (Original): The method of claim 1, further comprising:
obtaining the white point correction by determining a white point correction matrix; and
obtaining the chromatic correction by determining a chromatic correction matrix.
 3. (Original): The method of claim 2, wherein determining a white point correction matrix comprises:
displaying a color on a display device, the color being defined by an original white point matrix in a D50 illuminant condition; and
adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a print.
 4. (Original): The method of claim 3, wherein adjusting at least some white point matrix values comprises adjusting maximum phosphor settings on a display.
 5. (Original): The method of claim 2, wherein determining a chromatic correction matrix comprises:
displaying a color on a display device, the color being defined by an original chromatic matrix in a D50 illuminant condition; and
adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a print.

6. (Original): The method of claim 5, wherein adjusting at least some chromatic matrix values comprises adjusting chromaticity values in an RGB color space.
7. (Currently amended): The method of claim 6, wherein adjusting chromaticity values in an RGB color space comprises adjusting chromaticity values in an AdobeRGB(D50)(450) color space.
8. (Original): The method of claim 1 wherein generating corrected color coordinates based on the white point and chromatic corrections comprises generating a single correction matrix.
9. (Currently amended): A method comprising:
determining device-independent coordinates defining a color on a hard copy; and
generating corrected device-independent coordinates using the determined device-independent coordinates, a white point correction and a chromatic correction.
10. (Original): The method of claim 9, further comprising displaying the color using the corrected coordinates.
11. (Original): The method of claim 10, wherein the displayed color is visually equivalent to the color on the hard copy.
12. (Original): The method of claim 9, wherein the white point correction is a white point correction matrix and the chromatic correction is a chromatic correction matrix.
13. (Original): The method of claim 12, further comprising determining the white point correction matrix and the chromatic correction matrix.
14. (Original): The method of claim 13, wherein determining the white point correction matrix comprises:

displaying a color on a display device, the color being defined by an original white point matrix in a D50 illuminant condition; and

adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a white printout viewed in the D50 illuminant condition.

15. (Original): The method of claim 13, wherein determining the chromatic correction matrix comprises:

displaying a color on a display device, the color being defined by an original chromatic matrix in a D50 illuminant condition; and

adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a color printout viewed in the D50 illuminant condition.

16. (Currently amended): A method comprising:

converting device-dependent coordinates that define a color in a printing device to device-independent coordinates;

adjusting the device-independent coordinates using a white point correction and a chromatic correction; and

converting the ~~corrected~~ adjusted device-independent coordinates to device-dependent coordinates that define a color in a display device.

17. (Original): The method of claim 16, further comprising displaying the color using the corrected coordinates.

18. (Original): The method of claim 17, wherein the displayed color is visually equivalent to the color on the hard copy.

19. (Original): The method of claim 16, wherein the white point correction is a white point correction matrix and the chromatic correction is a chromatic correction matrix.

20. (Original): The method of claim 19, further comprising determining the white point correction matrix and the chromatic correction matrix.

21. (Original): The method of claim 20, wherein determining a white point correction matrix comprises:

displaying a color on a display device, the color being defined by an original white point matrix in a D50 illuminant condition; and

adjusting at least some white point matrix values so that visual appearance on the display device is visually equivalent to a print.

22. (Original): The method of claim 20, wherein determining a chromatic correction matrix comprises:

displaying a color on a display device, the color being defined by an original chromatic matrix in a D50 illuminant condition; and

adjusting at least some chromatic matrix values so that visual appearance on the display device is visually equivalent to a print.

23. (Currently amended): A method comprising:

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adjusting maximum phosphor values for a display device based on corrected device-independent coordinates so that a first color displayed on the display device matches white in a defined illuminant condition for a hard copy; and

adjusting color settings based on the corrected device-independent coordinates so that a second color displayed on the display device matches a defined color in the defined illuminant condition.

24. (Original): The method of claim 23, wherein the defined illuminant condition is a D50 illuminant condition.

25. (Original): The method of claim 23, wherein adjusting color settings comprises adjusting color settings within a computer program.

26. (Original): The method of claim 23, wherein adjusting color settings comprises adjusting chromaticity values in an RGB color space.

27. (Currently amended): The method of claim 25, wherein adjusting chromaticity values in an RGB color space comprises adjusting chromaticity values in an AdobeRGB(D50)(50) color space.

28. (Currently amended): A method comprising:
creating a first visual representation of an image on a hard copy; and
creating a second visual representation of the image on a display device including
adjusting device-independent coordinates, such that, wherein the first visual representation and
the second visual representation have different device-independent coordinates, and
wherein both white point and saturated colors on the display device are a good visual
match to those of the hard copy.

29. (Original): The method of claim 28, wherein the both white point and saturated colors on the display are visually equivalent to those of the hard copy.

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30. (Currently amended): A system comprising:
a display device;
a memory device; and
a processor coupled to the memory device and the display, wherein the processor:
obtains a white point correction for the display device from the memory device;
obtains a chromatic correction for the display device from the memory device; and
generates corrected device-independent color coordinates for the display device
based on device-independent coordinates associated with a hard copy, the white point
correction and the chromatic corrections.

31. (Currently amended): A system comprising:
a display device;
a memory device; and
a processor coupled to the display device and the memory device, wherein the processor:

adjusts ~~the~~ maximum phosphor values of the display device based on corrected device-independent coordinates so that a first color displayed on the display device matches white in a defined illuminant condition for a hard copy; and

adjusts color settings based on the corrected device-independent coordinates so that a second color displayed on the display device matches a defined color in the defined illuminant condition.

32. (Currently amended): The system of claim 31, wherein the defined illuminant condition is a D50 illuminant condition.

33. (Original): The system of claim 31, wherein adjusting color settings comprises adjusting chromaticity values in an RGB color space.

34. (Currently amended): The system of claim 31, wherein adjusting chromaticity values in an RGB color space comprises adjusting chromaticity values in an AdobeRGB(D50)(50) color space.

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35. (Currently amended): A system comprising:
a display device;
a memory device; and
a processor coupled to the display device and the memory device, wherein the processor:
receives a first set of image data from the memory device defining a first visual representation of an image on a hard copy;
creates a second set of image data defining a second visual representation of the image for display on the display device including adjusting first device-independent coordinates associated with the first set of image data to generate second device-independent coordinates associated with the second set of image data; and
displays the image on the display;
~~wherein the first set of image data and second set of image data have different device independent coordinates, and~~

wherein both white point and saturated colors of the image on the display are a good visual match to those of the hard copy.

36. (Original): The system of claim 35, wherein both white point and saturated colors of the image on the display are visually equivalent to those of the hard copy.

37. (Currently amended): A computer readable medium carrying program code that when executed:

receives a white point correction for a display device as input;
receives a chromatic correction for the display device as input; and
generates corrected device-independent color coordinates for the display device based on device-independent coordinates associated with a hard copy, the white point correction and the chromatic corrections.

38. (Currently amended): A computer readable medium carrying program code that when executed:

adjusts maximum phosphor values of the display device based on corrected device-independent coordinates so that a first color displayed on the display device matches white in a defined illuminant condition for a hard copy; and
adjusts color settings based on the corrected device-independent coordinates so that a second color displayed on the display device matches a defined color in the defined illuminant condition.

39. (Currently amended): The computer readable medium of claim 38, wherein the defined illuminant condition is a D50 illuminant condition.

40. (Original): The computer readable medium of claim 38, wherein adjusting color settings comprises adjusting chromaticity values in an RGB color space.

41. (Currently amended): A computer readable medium carrying program code that when executed:

receives a first set of image data from the memory device defining a first visual representation of an image on a hard copy;

creates a second set of image data defining a second visual representation of the image for display on the display device including adjusting first device-independent coordinates associated with the first set of image data to generate second device-independent coordinates associated with the second set of image data; and

displays the image on the display;

~~wherein the first set of image data and second set of image data have different device-independent coordinates, and~~

wherein both white point and saturated colors of the image on the display are a good visual match to those of the hard copy.

42. (Original): The computer readable medium of claim 41, wherein both white point and saturated colors of the image on the display are visually equivalent to those of the hard copy.

43. (Currently amended): A computer readable medium carrying a color profile data structure thereon, the color profile data structure corresponding to a first display device and including device-independent illuminant condition values that do not correspond to actual device-independent illuminant conditions associated with the first display device, such that wherein an image colors rendered on the display a second device using the color profile data structure is are visually equivalent to colors the image rendered on a printing the first device.